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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR .	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/507,299	09/10/2004	Masashi Yasumatsu	KOMI:032	4909
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STEPTOE & JOHNSON LLP 1330 CONNECTICUT AVENUE, N.W. WASHINGTON, DC 20036			EXAMINER DOTE, JANIS L	
			ART UNIT 1756	PAPER NUMBER
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/507,299

Applicant(s)

YASUMATSU ET AL.

Examiner

Janis L. Dote

Art Unit

1756

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 13 February 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 7-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 7-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

Art Unit: 1756

1. The examiner acknowledges the cancellation of claims 1-6 and the amendments to claim 7-10 filed on Feb. 13, 2007.

Claims 7-10 are pending.

2. The objection to the specification set forth in the office action re-mailed on Nov. 13, 2006, paragraph 1, has been withdrawn in response to the amendment to the specification filed on Feb. 13, 2007.

The rejections of claims 1-10 under 35 U.S.C. 112, second paragraph, set forth in the office action re-mailed on Nov. 13, 2006, paragraph 3, have been withdrawn in response to the cancellation of claims 1-6 and the amendments to claims 7-10 filed on Feb. 13, 2007.

The prior art rejections of claims 1-6 set forth in the office action re-mailed on Nov. 13, 2006, paragraphs 8-13, have been mooted by the cancellation of those claims filed on Feb. 13, 2007.

3. The amendment filed on Feb. 13, 2007, is objected to under 35 U.S.C. 132(a) because it introduces new matter into the disclosure. 35 U.S.C. 132(a) states that no amendment shall introduce new matter into the disclosure of the invention. The

Art Unit: 1756

added material which is not supported by the original disclosure is as follows:

In the amended paragraph beginning at page 6, line 15, of the specification, the amounts of the non-coordinating monoazo compound present in the monoazo metals-compound of "preferably 1 weight % at most," "less than 0.5 weight%" and "less than [sic: than] 0.1 weight%" (emphasis added).

The originally filed specification does not provide antecedent basis for the weight percentages now disclosed in the amended paragraph. The originally filed specification at page 6, lines 15-19, did not identify the basis of the disclosed percentages. Applicants have not indicated where in the originally filed specification there is antecedent basis for the weight percentages disclosed in the amended paragraph.

Applicants are required to cancel the new matter in the reply to this Office Action.

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Art Unit: 1756

5. Claims 7-10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 7 is indefinite in the phrase "R<sup>5</sup> is selected from the group consisting of a hydrogen atom . . . or a sulfone group" (emphasis added) for improper Markush language. Proper Markush language is "R is selected from the group consisting of . . . and . . ." (emphasis added) or "R is . . . or . . ." (emphasis added). MPEP 2173.05(h). Applicants are using a combination of both phrases. Thus, it is not clear what is the scope of the instant claims.

Claim 9 is indefinite in the phrase "(M)<sub>q</sub> where M comprises a bivalent, trivalent or tetravalent metallic element selected from the group consisting of . . . B and Si" because B and Si are not metallic elements. The instant specification at page 6, lines 9-10, identifies B and Si as metalloids, not as metallic elements.

6. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and

Art Unit: 1756

use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

7. Claims 7-10 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claims contain subject matter that was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

(1) Instant amended claims 7 and 9 recite that R<sup>1</sup>-, R<sup>2</sup>-, R<sup>3</sup>- and R<sup>4</sup>- can be "an alkyl group . . . comprising 1 to 18 carbon atoms," "an alkenyl group . . . comprising 2 to 18 carbon atoms" or "an alkoxy group . . . comprising 1 to 18 carbon atoms" (emphasis added).

The originally filed specification does not provide an adequate written description of the alkyl group, alkenyl group, or alkoxy group recited in instant claims 7 and 9. The originally filed specification at page 3, lines 10-12 and 14, discloses that the R groups can be "an alkyl group . . . having 1 to 18 carbon atoms," "an alkenyl group . . . having 2 to 18 carbon atoms" or "an alkoxy group . . . having 1 to 18 carbon atoms" (emphasis added). The claim language "comprising" is

Art Unit: 1756

open, not closed. The alkyl group, alkenyl group, and alkoxy group recited in instant claims 7 and 9 are broader than the originally disclosed groups because they include groups that comprise more than 18 carbon atoms.

(2) Instant claims 7 and 9 recite that  $R^7$  in  $-COOR^7$  "comprises a hydrogen atom or an alkyl group" (emphasis added).

The originally filed specification does not provide an adequate written description of " $R^7$ " as recited in instant claims 7 and 9. The originally filed specification at page 3, lines 16-17, discloses that " $R^7$  is a hydrogen atom or an alkyl group" (emphasis added). "Is" is "closed" language. The claim language "comprises" is open, not closed. The group  $R^7$  recited in instant claims 7 and 9 is broader than the originally disclosed  $R^7$  because it is not limited to be a hydrogen atom or an alkyl group, but includes chemical moieties that comprise a hydrogen atom or an alkyl group, such as phenyl or benzyl.

(3) Instant claims 7 and 9 recite that "-A- comprises -O- or -COO-" (emphasis added).

The originally filed specification does not provide an adequate written description of "-A-" as recited in instant claims 7 and 9. The originally filed specification at page 3, lines 16-17, discloses that "-A- is a hydrogen atom or an alkyl group" (emphasis added). "Is" is "closed" language. The claim

Art Unit: 1756

language "comprises" is open, not closed. The group "-A-" recited in instant claims 7 and 9 is broader than the originally disclosed "-A-" because it includes not only -O-, and -COO-, but chemical moieties that comprise -O- or -COO-, such as -CH<sub>2</sub>-O-.

(4) Instant claims 7 and 9 recite that R<sup>5</sup> can be "an alkyl group . . . comprising 1 to 18 carbon atoms" or "an alkenyl group . . . comprising 2 to 18 carbon atoms."

The originally filed specification does not provide an adequate written description of the alkyl group or alkenyl group recited in instant claims 7 and 9. The originally filed specification at page 3, lines 20-21, discloses that R<sup>5</sup> can be "an alkyl group . . . having 1 to 18 carbon atoms" or "an alkenyl group . . . having 2 to 18 carbon atoms" (emphasis added). The claim language "comprising" is open, not closed. The alkyl group and alkenyl group recited in instant claims 7 and 9 are broader than the originally disclosed groups because they include groups that comprise more than 18 carbon atoms.

(5) Instant claims 7 and 9 recite that R<sup>6</sup> can be "an alkyl group . . . comprising 1 to 18 carbon atoms," "an alkenyl group . . . comprising 2 to 18 carbon atoms" or "an alkoxy group . . . comprising 1 to 18 carbon atoms" (emphasis added).

The originally filed specification does not provide an adequate written description of the alkyl group, alkenyl group,



Art Unit: 1756

or alkoxy group recited in instant claims 7 and 9. The originally filed specification at page 4, lines 5-7 and 9, discloses that R<sup>6</sup> can be "an alkyl group . . . having 1 to 18 carbon atoms," "an alkenyl group . . . having 2 to 18 carbon atoms" or "an alkoxy group . . . having 1 to 18 carbon atoms" (emphasis added). The claim language "comprising" is open, not closed. The alkyl group, alkenyl group, and alkoxy group recited in instant claims 7 and 9 are broader than the originally disclosed groups because they include groups that comprise more than 18 carbon atoms.

(6) Instant claim 7 recites "a metal coordinating to the monoazo compound comprising a metallic element . . ." (emphasis added).

The originally filed specification does not provide an adequate written description of the metal coordinating to the monoazo compound as recited in instant claim 7. The originally filed specification at page 4, lines 10-11, discloses that "metals of a metallic element" coordinates the monoazo compound. The claim language "comprising" is open, not closed. The "metal . . . comprising a metallic element" recited in instant claim 7 is broader than the originally disclosed "metals of metallic element" because it includes not only the metal of a metallic

Art Unit: 1756

element, but groups that comprise said metal of a metallic element, such as  $\text{-Ti(Cl)}_2\text{-}$ .

(7) Instant claim 9 recites that "M comprises a bivalent, trivalent or tetravalent metallic element" (emphasis added).

The originally filed specification does not provide an adequate written description of "M" as recited in instant claim 9. The originally filed specification at page 5, lines 2-3, discloses that "M is metals selected from a bivalent, trivalent or tetravalent metallic element and a metalloid of boron or silicon" (emphasis added). "Is" is "closed" language. The claim language "comprises" is open, not closed. "M" recited in instant claim 9 is broader than the originally "M" because it includes not only the metallic element, but groups that comprise said metallic element, such as  $\text{-Ti(Cl)}_2\text{-}$ .

(8) Instant claim 9 recites that  $R^8$  can be "an alkyl group comprising 1 to 8 carbon atoms" (emphasis added).

The originally filed specification does not provide an adequate written description of the alkyl group recited in instant claim 9. The originally filed specification at page 5, lines 5-6, discloses that " $R^8$  is an alkyl group having 1 to 8 carbon atoms or an aryl group" (emphasis added). The claim language "comprising" is open, not closed. The alkyl group, recited in instant claim 9 is broader than the originally

Art Unit: 1756

disclosed alkyl group having 1 to 8 carbon atoms because it includes alkyl groups that comprise more than 8 carbon atoms.

8. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

9. Claims 7 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 5,077,168 (Ogami) combined with US 5,204,453 (Chambon).

Ogami discloses a toner comprising a colorant, a particular binder resin, and a charge controlling agent dispersed therein at a concentration of at least 0.3 % by weight, wherein the charge controlling agent has a particle distribution such that "the area ratio of particles having a particle size larger than 2.5  $\mu\text{m}$  is at least 80% based on the section of the toner." Col. 2, lines 10-22, and col. 4, lines 6-9. According to Ogami, said toner has a wide fixing temperature range and a high fixing ratio without being influenced by the environment or the kind of copying machine. Col. 2, lines 3-9. Ogami teaches that in order to produce such a charge controlling agent particle distribution, it is preferred that a charge controlling agent having a median diameter based on volume of at least 5  $\mu\text{m}$  be incorporated and dispersed in the particular binder resin.

Art Unit: 1756

Col. 3, lines 31-39; and col. 4, lines 7-13. Ogami teaches that the charge controlling agent is preferably a metal-containing complex dye, especially a 2:1 type metal-containing complex salt dye (dye molecule/metal = 2/1). Ogami teaches that the dye can be represented by the formula disclosed at col. 4, lines 20-40, where the metal is Cr, Co, Fe, Ni, or Cu. Ogami teaches that the metal complex salt dye can be synthesized by known means and is then pulverized and classified to obtain the desired particle diameter. Col. 4, lines 41-44.

Ogami does not exemplify a charge controlling agent comprising the metal-containing complex compound as recited in the instant claims. However, as discussed above, Ogami teaches that the charge controlling agent can be a 2:1 type Co-, Fe-, or Ni-containing complex salt dye.

Chambon discloses a monoazo-metal compound that meets the compositional limitations of formulas (I) and (II) recited in instant claims 7 and 9, respectively. The Chambon monoazo-metal compound is a symmetrical 1:2 metal complex azo dye (metal:two identical azo ligands = 1:2) of the formula (1) disclosed at col. 7, lines 10-26, of Chambon. Chambon teaches that the monoazo-metal compound can be represented by the 1:2 chromium complex of monoazo compound (24) disclosed at col. 12, lines 15-20. Monoazo compound (24) comprises a phenyl group

Art Unit: 1756

substituted with a nitro group and a naphthyl group substituted with the group  $\text{-NHCO-OCH}_3$ , which is within the compositional limitations of the group  $\text{-NHCO-O-R}^6$  when  $\text{R}^6$  is an alkyl group comprising 1 to 18 carbon atoms as recited in instant claims 7 and 9. Chambon further discloses that the metal in the monoazo complex can equally be cobalt or iron. Col. 7, line 24. The Chambon symmetrical 1:2 (metal: two identical azo ligands) metal complex azo dye meets the Ogami 2:1 type metal-containing complex salt dye (dye molecule/metal = 2/1).

It would have been obvious for a person having ordinary skill in the art, in view of the teachings of Ogami and Chambon, to adjust, through routine experimentation, the Chambon 1:2 Co- or Fe- azo complex dye as taught by Ogami, such that the resultant 1:2 Co- or Fe-azo complex salt dye has a volume median particle diameter of 5  $\mu\text{m}$ . It would have also been obvious for that person to use the resultant 1:2 Co- or Fe-azo complex salt dye as the Ogami charge controlling agent in the toner disclosed by Ogami. That person would have had a reasonable expectation of successfully obtaining a toner having the properties taught by Ogami.

10. Claims 7-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 5,500,318 (Tanikawa) combined with Chambon.

Art Unit: 1756

Tanikawa discloses a toner comprising a colorant, a particular binder resin, and a charge controlling agent. Tanikawa teaches that the binder resin can be a styrene-acrylate copolymer having an acid value of 7.1 mg KOH/g, which is within the acid range of 5 to 50 mg KOH/g recited in instant claims 8 and 10. See resin B at col. 18, line 61, to col. 19, line 7, and in Table 1 at col. 19; and example 2 at col. 21. Tanikawa further teaches that the binder resin can be a polyester resin having preferably an acid value of at most 50 mg KOH/g. Col. 10, lines 26-28. The upper limit, 50 mg KOH/g, of the Tanikawa acid value range of "at most 50 mg KOH/g" is within the acid value range recited in instant claims 8 and 10. The Tanikawa acid value range of "at most 50 mg KOH/g" also overlaps the acid value range recited in instant claims 8 and 10. The Tanikawa binder resin meets the compositional limitations of the binder resin recited in instant claims 8 and 10. Tanikawa teaches that the colorant can be an appropriate pigment or dye or can be a magnetic material. Col. 16, lines 44-47; and col. 16, line 64, to col. 17, line 2. According to Tanikawa, its toner has sufficient anti-offset properties and has excellent fixing properties. Col. 3, lines 35-43; col. 20, lines 55-59; and Table 3 at col. 23, example 2.

Art Unit: 1756

Tanikawa does not exemplify a toner comprising the monoazo compound recited in instant claims 7 and 9. However, Tanikawa teaches that the charge controlling agent can be an organic metal complex, such as an azo metal-containing complex salt dye as shown in formula (I) disclosed at col. 12, lines 30-48; and col. 15, lines 36-38. Tanikawa teaches that the coordinating metal in the azo metal-containing complex can be Sc, Ti, V, Cr, Co, Ni, Mn, or Fe. Col. 12, lines 40-41. Tanikawa further teaches that the cation can be hydrogen, sodium, potassium, ammonium, or aliphatic ammonium. Col. 12, lines 47-48.

Chambon discloses a monoazo-metal compound that meets the compositional limitations of formulas (I) and (II) recited in instant claims 7 and 9, respectively, where the coordinating metal can be Co or Fe. The discussion of Chambon in paragraph 9 above is incorporated herein by reference. Chambon further teaches that dye can be in the form of a free acid or in the form of a salt, such as sodium, potassium, or ammonium salts. Col. 13, lines 4-9. The Chambon symmetrical 1:2 (metal: two identical azo ligands) metal complex azo dye meets the Tanikawa azo metal-containing complex of formula (I).

It would have been obvious for a person having ordinary skill in the art, in view of the teachings of Tanikawa and Chambon, to use the Chambon 1:2 Co- or Fe-azo complex salt dye

Art Unit: 1756

as the charge controlling agent in the toner disclosed by Tanikawa. That person would have had a reasonable expectation of successfully obtaining a toner having the properties taught by Tanikawa.

11. Claims 7-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 5,500,318 (Tanikawa) combined with US 4,427,585 (Beffa'585).

Tanikawa discloses a toner comprising a colorant, a particular binder resin, and a charge controlling agent, as described in paragraph 10, which is incorporated herein by reference.

Tanikawa does not exemplify a toner comprising the monoazo compound recited in instant claims 7 and 9. However, Tanikawa teaches that the charge controlling agent can be an organic metal complex, such as an azo metal-containing complex salt dye, as shown in formula (I) disclosed at col. 12, lines 30-48; and col. 15, lines 36-38. Tanikawa teaches that the coordinating metal in the azo metal-containing complex can be Sc, Ti, V, Cr, Co, Ni, Mn, or Fe. Col. 12, lines 40-41. Tanikawa further teaches that the cation can be hydrogen, sodium, potassium, ammonium, or aliphatic ammonium. Col. 12, lines 47-48.



Art Unit: 1756

Beffa'585 discloses a monoazo-metal dye mixture that comprises a monoazo-metal dye that meets the compositional limitations of formulas (I) and (II) recited in instant claims 7 and 9, respectively. The Beffa'585 monoazo-metal dye mixture comprises the asymmetrical metal complex azo dye of formula (I) disclosed at col. 1, lines 15-39, of Beffa'585, the symmetrical metal complex azo dye of the formula (II) disclosed at col. 1, lines 45-65, of Beffa'585, and the symmetrical metal complex azo dye of formula (III) disclosed at col. 2, lines 1-26, of Beffa'585. In formulas (I), (II), and (III), the group Me can be cobalt. Col. 1, line 36; col. 2, line 30; and example 2 at cols. 5 and 6. In example 2, the Me in formulas (I), (II), and (III) is cobalt and the cation is sodium. The Beffa'585 metal complex azo dye formula (II) comprises a monoazo moiety that comprises a phenyl group substituted with a sulfonamide group and a naphthyl group substituted with the group  $\text{-NHCO-OCH}_3$ , which is within the compositional limitations of the group  $\text{-NHCO-O-R}^6$  when  $\text{R}^6$  is an alkyl group having 1 to 18 carbon atoms as recited in instant claims 7 and 9. The Beffa'585 metal complex azo dye formula (I) comprises a monoazo moiety that comprises a phenyl group substituted with a sulfonamide group and a naphthyl group substituted with the group  $\text{-NHCO-OCH}_3$ , which is within the compositional limitations of the group  $\text{-NHCO-O-R}^6$  when  $\text{R}^6$  is an

Art Unit: 1756

alkyl group having 1 to 18 carbon atoms as recited in instant claim 7. The Beffa'585 symmetrical and asymmetrical cobalt azo complex dyes of formulas (II) and (I), respectively, and the symmetrical cobalt azo compound of formula (III) meet the Tanikawa azo metal-containing complex of formula (I).

It would have been obvious for a person having ordinary skill in the art, in view of the teachings of Tanikawa and Beffa'585, to use the Beffa'585 1:2 cobalt complex azo dye mixture in example 2 of Beffa'585 as the charge controlling agent in the toner disclosed by Tanikawa. That person would have had a reasonable expectation of successfully obtaining a toner having the properties taught by Tanikawa.

12. Applicants' arguments filed on Feb. 13, 2007, as applicable to the rejections in paragraphs 9-11 above have been fully considered but they are not persuasive.

Applicants assert that none of the references teaches or suggests the azo metal-containing complexes of formulas (I) or (II) recited in instant claims 7 and 9, respectively.

However, as discussed in the rejections in paragraphs 9 and 10 above, Chambon teaches cobalt- or Fe-containing azo complexes that meet the compositional limitations of

Art Unit: 1756

formulas (I) and (II) recited in instant claims 7 and 9, respectively. As discussed in paragraph 11 above, Beffa'585 also teaches cobalt-containing azo complexes that meet the compositional limitations of formulas (I) and (II) recited in instant claims 7 and 9, respectively. Accordingly, the combined teachings of the references in paragraphs 9-11 render prima facie obvious the toner recited in the instant claims.

Applicants further assert that its combination of the monoazo compounds of formulas (I) and (II) having a -NHCO-O-R substituted naphthol group with the claimed coordinating element provides "unexpected properties." Applicants assert that the claimed toner provides a high quality developed image.

However, the showing in the instant specification is insufficient to show that the toner recited in the instant claims provides unexpected results over the prior art. The showing is not commensurate in scope with instant claims 7 and 9. The instant specification exemplifies five toners comprising five particular monoazo metal compounds - compound Nos. II-1, II-2, II-37, II-14, and II-38. All five monoazo metal compounds are symmetrical 2:1 (2 dye compounds: metal) compounds represented by formula (II) in claim 9. In compound Nos. II-1 and II-37, M is Fe, the naphthol group is substituted at the 8-position with -NHCO-O-CH<sub>3</sub> and the phenyl is substituted

Art Unit: 1756

at the 4-position with chlorine or fluorine, respectively. In compound no. II-14, M is Fe, the naphthol group is substituted at the 3-position with  $\text{-NHCO-O-CH}_3$  and the phenyl is substituted at the 4-position with chlorine. In compound nos. II-2 and II-38, M is Al, the naphthol group is substituted at the 8-position with  $\text{-NHCO-O-CH}_2\text{CH}_3$  and the phenyl is substituted at the 4-position with a t-butyl or  $\text{-SO}_2\text{NH}_2$ , respectively. The five symmetric azo Fe or Al compounds are not representative of the entire scope of the compounds of formula (I) recited in instant claim 7. Formula (I) is not limited to symmetric 2:1 azo compounds, but also encompasses asymmetric 2:1 azo compounds, such as the 2:1 cobalt asymmetric azo complex of formula (I) of Beffa'585. In addition, formulas (I) and (II) recited in instant claims 7 and 9, respectively, do not limit the substitution position of the  $\text{-NHCOO-R}$  group on the naphthyl group. Nor do the formulas limit the substitution position on the phenyl group or the substituent to be only chlorine, fluorine, a t-butyl, or a sulfonamide. Furthermore, the exemplified toners comprising the five symmetric azo Fe or Al compounds are not fairly representative of the broad class of azo compounds of formula (I) comprising the other ten named metallic elements or broadly recited "metalloids" recited in the Markush group of claim 7. Nor do the five symmetric azo Fe or

Art Unit: 1756

Al compounds appear to be representative of the broad class of azo compounds of formula (II) comprising the other twelve named "metallic elements" recited in the Markush group of claim 9.

Applicants' showing is not commensurate with the scope of the exclusion protection they seek. Thus, because the showing in the instant specification is not commensurate in scope with the instant claims, and due to the welter of unconstrained variables, it cannot be reasonably determined whether the entire scope of the instant claims provides "unexpected" results over the prior art as alleged by applicants.

In addition, the showing in the instant specification does not appear to provide a probative comparison to Ogami. Ogami requires that its toner comprise a particular styrene-acrylic copolymer as the binder resin and that the charge control agent be dispersed with a particular particle size. Both requirements appear to be critical to the invention of Ogami. See Ogami, col. 2, lines 10-22. Comparative examples 1-3 and 5 of the instant specification do not exemplify toners comprising the critical elements disclosed by Ogami. Because the showing in the instant specification does not compare to Ogami, it is not clear whether the instantly claimed toner provides "unexpected" results over the prior art.

Art Unit: 1756

Accordingly, the prior art rejections in paragraphs 9-11 stand.

13. Applicants' amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicants are reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Janis L. Dote whose telephone number is (571) 272-1382. The examiner can normally be reached Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Mark Huff, can be reached on (571) 272-1385. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Any inquiry regarding papers not received regarding this communication or earlier communications should be directed to Supervisory Application Examiner Ms. Claudia Sullivan, whose telephone number is (571) 272-1052.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval

Art Unit: 1756

(PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JLD  
May 7, 2007

*Janis L. Dote*  
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1700